

What is claimed is:

1 1. A shield assembly for a connector that is connected to a port of a chassis, a
2 cable extending from the connector, the shield assembly comprising:

3 a cover defining a chamber to enclose the connector;
4 an attachment mechanism adapted to attach the cover to the chassis; and
5 a cable engagement body having an opening with a width less than a width
6 of the chamber, the opening adapted to surround an outer surface of a portion of the
7 cable.

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1 2. The shield assembly of claim 1, wherein the cover is formed of an
2 electrically conductive material.

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1 3. The shield assembly of claim 1, wherein the cable engagement body
2 comprises a neck portion extending from the cover.

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1 4. The shield assembly of claim 1, wherein the cable engagement body is
2 integrally formed with the cover.

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1 5. The shield assembly of claim 4, wherein the cable engagement body has
2 an outer width that is less than an outer width of the cover.

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1 6. The shield assembly of claim 1, wherein the cable engagement body
2 comprises an inner surface defining the opening, and wherein the width of the opening is
3 substantially the same as a width of the cable to enable the inner surface of the cable
4 engagement body to contact an outer surface of the cable.

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1 7. The shield assembly of claim 6, wherein the cable engagement body is
2 formed at least in part of an electrically conductive material to enable the cable
3 engagement body to be capacitively coupled to a shield of the cable.

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1 8. The shield assembly of claim 6, wherein the cable engagement body
2 comprises an electrically conductive element adapted to pierce through an outer jacket of
3 the cable to enable electrical connection between the cable engagement body and a shield
4 of the cable.

pierce

1 9. The shield assembly of claim 1, wherein the opening has a predetermined
2 length, the opening adapted to surround the outer surface of the portion of the cable along
3 the predetermined length.

1 10. The shield assembly of claim 1, wherein the opening has a cross-sectional
2 shape selected from the group consisting of generally circular, oval, rectangular, and
3 square.

1 11. The shield assembly of claim 1, wherein the opening has a cross-sectional
2 shape that forms a closed polygon.

1 12. A connector assembly for mating with a port in a chassis, comprising:
2 a connector having a housing, the connector adapted to mate with the port;
3 a cable extending from the connector; and
4 a shroud adapted to enclose the connector housing, the shroud having an
5 electrically conductive first end to electrically contact the chassis and a cable engagement
6 body having an inner opening to receive the cable, the cable engagement body having an
7 inner surface in contact with an outer surface of the cable.

1 13. The connector assembly of claim 12, wherein cable engagement body
2 comprises a neck portion having an outer width that is less than an outer width of another
3 part of the shroud.

1 14. The connector assembly of claim 12, wherein the cable comprises a shield
2 and an outer insulating layer, and wherein the inner surface of the cable engagement body
3 is capacitively connected to the cable shield through at least the outer insulating layer.

1 15. The connector assembly of claim 14, wherein a capacitive impedance is
2 provided between the cable engagement body and the cable shield in response to
3 transmission of a signal at a predetermined frequency in the cable.

1 16. The connector assembly of claim 12, wherein the shroud defines a
2 chamber in which the connector is located, the width of the inner opening being less than
3 a width of the chamber.

1 17. The connector assembly of claim 12, wherein the cable engagement body
2 has a predetermined length, the cable engagement body surrounding a portion of the
3 cable along the predetermined length.

1 18. The connector assembly of claim 12, further comprising an attachment
2 mechanism adapted to attach the shroud to the chassis.

1 19. The connector assembly of claim 18, further comprising an *gasket*
2 ~~electromagnetic interference gasket~~ in contact with a surface of the shroud to enhance the
3 electrical contact between the shroud and the chassis.

1 20. The connector assembly of claim 12, wherein the cable has an outer *pierce*
2 insulating jacket and a shield, and the cable engagement body has at least one piercing
3 element protruding from the inner surface of the cable engagement body, the piercing
4 element adapted to penetrate the outer jacket of the cable to electrically contact the cable
5 shield.

1 21. The connector assembly of claim 12, wherein the connector comprises one
2 or more contacts contained in the connector housing.

1 22. The connector assembly of claim 21, wherein the cable comprises a shield,
2 and wherein the connector housing is electrically contacted to the shield.

1 23. The connector assembly of claim 21, wherein the cable has an outer
2 shield, the inner surface of the cable engagement body being in electrical contact with the
3 outer shield.

1 24. A method of reducing electromagnetic interference, comprising:
2 providing a connector having a housing;
3 electrically contacting the connector housing to a shield of a cable;
4 enclosing the connector within a shroud; and ~~_____~~ X
5 contacting an inner surface of a portion of the shroud to an outer surface of
6 the cable extending from the connector.

1 25. The method of claim 24, further comprising:
2 communicating a signal at a predetermined frequency in the cable; and
3 providing a capacitive impedance between the shroud portion and the
4 cable shield to reduce electromagnetic leakage.

1 26. The method of claim 24, wherein contacting the inner surface of the
2 shroud portion to the outer surface of the cable comprises contacting the inner surface to
3 the cable shield.

1 27. The method of claim 26, wherein contacting the cable shield comprises
2 penetrating, with a piercing element, an outer jacket of the cable, the piercing element
3 being electrically conductive to electrically connect the shroud portion and the cable
4 shield.

1 28. The method of claim 26, further comprising removing at least a portion of
2 an outer jacket of the cable to enable the shroud portion to contact the cable shield.

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Van Door

Physical Contact

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1 29. A system comprising:
2 a chassis having a structure defining a port;
3 a connector adapted to mate with the port;
4 a cable extending from the connector; the cable having a shield, the
5 connector having a housing electrically contacted to the structure and the shield; and
6 a shroud enclosing the connector.

1 30. The system of claim 29, wherein the shroud has a portion defining a bore
2 surrounding an outer surface of the cable.

1 31. The system of claim 30, wherein a capacitive connection is provided
2 between the shroud portion and the cable shield.

1 32. The system of claim 31, wherein the shroud portion comprises a neck
2 portion.

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